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Attached to this cover-sheet please find the following documents:

- -Certificate of Mailing (1 page)
- -Response to Notification of Non-Compliant Appeal Brief (1 page, in duplicate);
- -Fee Transmittal (1 page, in duplicate);
- -Appeal Brief (27 pages);
- -APPENDIX A Applicant's Claims;
- -APPENDIX B Applicant's Figures;
- -APPENDIX C Non-Final Office Action, dated 27 August 2004;
- -APPENDIX D Final Office Action, dated 10 February 2005;
- -APPENDIX E U. S. Patent Application No. 5,400,248;
- -APPENDIX F U. S. Patent Application No. 4,210,962; and
- -Return Postcard

(The above documents are being submitted in triplicate)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Tribble

Serial No.: 09/668,125 Filed:

21 September 2000 21 2005 Title: Business Rules System \ 3

Date: October 21, 2005

Docket No.: NETS0044

Art Unit: 3626

Examiner: Frenel, Vanel

Commissioner for Patents Mail Stop - Appeal Brief Patents P.O. Box 1450 Alexandria, VA 22313-1450

Response to Notification of Non-Compliant Appeal Brief (37 CFR 41.37)

Sir:

Responsive to the Notification of Non-Compliant Appeal Brief, mailed on 21 September 2005, Applicant submits herewith, in triplicate, a revised Appeal of Brief. In particular, Applicant has addressed items 4 and 10 of the aboveidentified notification. Thus, the summary of claims matter now refers to the specification by page and line number and to the drawings, as appropriate, by reference characters. Additionally, in Claims 4, 8, 11, 15, and 18, every means plus function element (35 USC 112 paragraph 6) is identified in the structure, material, or acts described in the specification as corresponding each claim element are set forth with reference to specification by page and line number, and to the drawings, as appropriate, by reference characters.

The Commissioner is authorized to charge the Appeal Brief fee of \$500, any additional fees due, and credit any overpayments to the Glenn Patent Group Deposit Account No. 07-1445, Customer No. 22862. Applicant considers this document to be filed in a timely manner.

Respectfully submitted,

Michael A. Glenn Reg. No. 30,176

Customer No. 22,862

PTO/SB/17 (12-04v2)

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FEE TRANSMITTAL	Filing Date	09/21/2000							
For FY 2005	First Named Inventor	Tribble							
	Examiner Name	Vanel Frenel							
Applicant claims small entity status. See 37 CFR 1.27	Art Unit	3626							
TOTAL AMOUNT OF PAYMENT (\$) 500.00	Attorney Docket No.	NETS0044							
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3. APPLICATION SIZE FEE If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer									
listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
Sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(d) Total Sheets Extra Sheets Number of each	and 37 CFR 1.10(8). h additional 50 or fract	ion thereof Fee (\$)	Fee Paid (\$)						

SUBMITTED BY			
Signature	N ,	Registration No. (Attorney/Agent) 30,176	Telephone 650-474-8400
Name (Print/Type	e) Michael A. Glenn		Date 21 October 2005

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Filing a brief in support of an appeal (1402)

4. OTHER FEE(S)

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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Signature:

BEFORE THE UNITED STATES PATENT AND TRADEMARK OFFICE BOARD OF APPEALS AND INTERFERENCES

In re Application of

Tribble

Serial No.

09/668,125

Filed

9/21/00

Art Unit

3626

Examiner

Frenel

Title

Business Rules System

Atty. Docket No.

NETS0044

Honorable Commissioner of Patents and Trademarks P O Box 1450 Alexandria, VA 2231301450

BRIEF ON APPEAL

This is an appeal from the Primary Examiner of Group Art Unit 3626 refusing Claims 1-4, 6-11, 13-18, 20, and 21 set forth in APPENDIX A hereto.

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APPENDIX E - U.S. Patent No. 5,400,248

APPENDIX F - U.S. Patent No. 4,210,962

REAL PARTY IN INTEREST

The subject application was assigned to American Online, Inc., a corporation of the state of Delaware. The assignment to was recorded in the U.S. Patent & Trademark Office on the date of 2/6/01, at Reel 11532, Frame 238.

RELATED APPEALS AND INTERFERENCES

No other appeals or interferences are known to be related to the subject patent application.

STATUS OF CLAIMS

The application was originally filed with Claims 1-21. Claims 5, 12, and 19 have been canceled. Therefore, Claims 1-4, 6-11, 13-18, 20, and 21 are pending in the application.

Claims 1-4, 6-11, 13-18, 20, and 21 stand rejected; these claims are being appealed.

STATUS OF AMENDMENTS

Amendments were submitted 2/10/04, 7/7/04, and 11/29/04, and have been entered by the Examiner.

SUMMARY OF CLAIMED SUBJECT MATTER

The invention provides a business rules system. The system creates dynamic solution sets in response to interactions between real-world objects. In addition, the invention provides a system that allows the user to easily create and maintain the rules describing and governing a business system.

A preferred embodiment of the invention creates a dynamic solution set between objects that have never been associated with one another prior to that particular instance of evaluation. A rule engine evaluates the associated objects. The rule engine is

programmed to evaluate a complex situation, come up with a solution and, as a result, not require the intervention of a human being.

The invention's rule engine enables the user to customize the behavior of business objects (e.g., access control, order management, catalogs, and membership) to meet sophisticated business requirements. The invention provides a graphical user interface that allows a user to rapidly set up and maintain Business Rules in real time - with no source code recompilation needed. Domain tables are used to define the overall set of possible values for a given attribute of an object.

Each rule may have one to many classes of interacting objects. A voter is a member or business object such as a product, price list, or ship-to location that provides input to be evaluated by the rule. Each instance of a voter may have a data value (vote) for a specific rule. Voters also have a hierarchical inheritance.

Rule resolution strategies are used by the invention to resolve any conflicts between specific preferences of voters and to determine the correct answer to be used in an application program. The sequence of business objects and the order of the values included in each object determine the values of the results. The rule resolution logic returns only one answer for a question that references a set of business objects.

The following provides a summary of the claimed matter, referring to the specification by page and line number and to the drawings, as appropriate, by reference characters. Additionally, in Claims 4,8,11,15, and 18 every mean plus function element (35 USC 112 ¶6) is identified, and the structure, materials, or acts described in the specification as corresponding to each claimed function is set forth with reference to the specification by date and line number and to the drawing, as appropriate, by reference characters:

1. A process for evaluating business objects (page 6, lines 11-14; page 9, lines 10-20) with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising the steps of:

providing a rule engine (page 6, lines 6-9; page 23, lines 8-20; Fig. 9:904; Fig. 10:105)

wherein said rule engine evaluates said business object (page 6, lines 6-10; Fig. 1:103);

providing administration means for allowing a user to maintain preferences for a specific instance of a business object (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803);

wherein said rule engine uses business rules (page 10, lines 10-23) to evaluate a relationship between said business objects;

wherein each business object is a voter (page 14, lines 8-24) that provides votes that are evaluated by said business rules;

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set (page 16, line 31 to page 18, line 23; Fig. 5A and 5B: 502, 505-516); and

wherein a sequence of voters and an order of the votes included for each voter determine values in said solution set (page 19, lines 19-23).

- 4. The process of claim 1, further comprising the step of:
 providing rule administration means for allowing a user to define business rule
 attributes (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703;
 Fig. 8: 801-803);
- 8. An apparatus for evaluating business objects (page 6, lines 11-14; page 9, lines 10-20) with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising:

a rule engine(page 6, lines 6-9; page 23, lines 8-20; Fig. 9:904; Fig. 10:105); wherein said rule engine evaluates said business objects (page 6, lines 6-10; Fig. 1:103);

administration means for allowing a user to maintain preferences for a specific instance of a business object (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803);

wherein said rule engine uses business rules to evaluate a relationship between said business objects(page 10, lines 10-23);

wherein each business object is a voter that provides votes that are evaluated by said business rules(page 14, lines 8-24);

rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set(page 16, line 31 to page 18, line 23; Fig. 5A and 5B: 502, 505-516); and

wherein the sequence of voters and the order of the votes included for each voter determines values in said solution set(page 19, lines 19-23).

11. The apparatus of claim 8, further comprising:

rule administration means for allowing a user to define business rule attributes (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803)

15. A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for evaluating business objects (page 6, lines 11-14; page 9, lines 10-20) with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising the steps of:

providing a rule engine (page 6, lines 6-9; page 23, lines 8-20; Fig. 9:904; Fig. 10:105)

wherein said rule engine evaluates said business objects (page 6, lines 6-10; Fig. 1:103);

providing administration means for allowing a user to maintain preferences for a specific instance of a business object (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803);

wherein said rule engine uses business rules to evaluate a relationship between said business objects (page 10, lines 10-23);

wherein each business object is a voter that provides votes that are evaluated by said business rules (page 14, lines 8-24);

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set (page 16, line 31 to page 18, line 23; Fig. 5A and 5B: 502, 505-516); and

wherein the sequence of voters and the order of the votes included for each voter determines values in said solution set (page 19, lines 19-23).

18. The method of claim 15, further comprising the step of:

providing rule administration means for allowing a user to define business rule attributes (page 6, lines 11-14; page 11, lines 8-13; page 12, lines 7-23; Fig. 7:701-703; Fig. 8: 801-803);.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-4, 6-11, 13-18, 20, and 21 were rejected under 35 USC 103 as being unpatentable over USPN 5,400,248 (Chisholm) in view of USPN 4,210,962 (Marsh).

The foregoing rejections were made in the non-final Office Action, dated 8/27/04, which is enclosed under Appendix C. These rejections have been maintained in the final Office Action, dated 2/10/05 (Appendix D).

APPLIED PRIOR ART REFERENCES

For ease of reference, USPN 5,400,248 (Chisholm) in view of USPN 4,210,962 (Marsh) are shown in Appendices E and F, respectively.

THE ISSUES

The sole issue in this appeal is whether:

Claims 1-4, 6-11, 13-18, 20, and 21 were properly rejected under 35 USC 103 as being

unpatentable over USPN 5,400,248 (Chisholm) in view of USPN 4,210,962 (Marsh). <u>GROUPING OF CLAIMS</u>

The claims stand or fall together.

ARGUMENT AND DISCUSSION

Subparagraph (i) B 35 USC 112, FIRST PARAGRAPH

No grounds of rejection exist under this subparagraph.

Subparagraph (ii) -- 35 USC 112, SECOND PARAGRAPH

No grounds of rejection exist under this subparagraph.

Subparagraph (iii) -- 35 USC 102

No grounds of rejection exist under this subparagraph.

Subparagraph (iv) -- 35 USC 103 REJECTIONS

The Office Action dated 8/27/04 rejected Claims 1-4, 6-11, 13-18, 20, and 21 under 35 USC 103 as being unpatentable as follows:

Claims 1-4, 6-11, 13-18, 20, and 21 were rejected under 35 USC 103 as being unpatentable over USPN 5,400,248 (Chisholm) in view of USPN 4,210,962 (Marsh).

Applicants previously traversed, and presently appeal these rejections. The Office Action of 2/10/05 maintained the previous grounds of rejection. The claims are patentable as-is,

because the Examiner has failed to satisfy the requirements to establish a *prima facie* case of obviousness, as discussed in greater detail below.¹

First, the *prima facie* obviousness case is incomplete because, even if the references were to be combined as suggested (albeit improperly, as discussed below), the combination still does not teach or suggest all the claim limitations.² To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.³

All words in a claim must be considered in judging the patentability of that claim against the prior art.⁴ In the following, Applicant will address the claims that are rejected by the Examiner. It is respectfully submitted that these claims are not obvious to a person skilled in the art when considering the Examiner's proposed combinations.

Claim 1

The Examiner has stated (Office Action, dated 8/27/04), with regard to Claim 1, Chisholm discloses:

providing a rules engine;

(col. 5, lines 17-35: the Examiner interprets Chisholm's voter administrator program to be a form of "rules engine": in the Office Action of 2/10/05, the Examiner further stated that he

¹ MPEP 2142.

² MPEP 2142, 2143.03.

³ Ex Parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). MPEP 706.02(j).

⁴ In re Wilson, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970). MPEP 2143.03.

has "relied upon Chisholm for the teaching of "each business object being a voter (See Chisholm, col. 5, lines 12-34) that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of votes determines values in a solution set (See Chisholm, col. 9, lines 35-50; col. 10, line 55-68 to col. 11, line 3) which correspond to Applicant (*sic*) claimed feature." As discussed below, this is not what Chisholm teaches.)

wherein said rules engine evaluates said business objects;

(col. 5, lines 23-34: the Examiner interprets "votes" as "business objects." Again, as discussed below, this is a mischaracterization of "votes" as taught by Chisholm and "business objects" as taught by Applicant. They are in no way analogous.)

providing administration means for allowing a user to maintain preferences for a specific instance of a business object;

(col. 5, lines 12-34)

wherein said rule engine uses business rules to evaluate a relationship between said business objects;

(col. 5, lines 55-68: the Examiner understands conditional votes are votes having a relationship to other votes. Again, as discussed below, the Examiner is clearly mistaken.)

wherein each business object is a voter that provides votes that are evaluated by said business rules;

(col. 5, lines 12-34)

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set; and

(col. 5, lines 55-65; col. 8, lines 10-44)

wherein a sequence of voters and an order of the votes included for each voter determine values in said solution set.

(col. 9, lines 35-50; col. 10, lines 55-68 to col. 11, line 3)

The Examiner acknowledges that Chisholm does not "disclose a process for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment." Nonetheless, the Examiner finds this aspect of the invention set forth in Claim in Marsh (col. 3, lines 8-11; col. 4, lines 22-28).

With regard to Claim 1, the proposed combination of references fails to teach the claimed invention. Looking at the cited references, Chisholm discloses a voting system that allows voters to express and cast votes that are conditional on the votes of others of a voting group. Chisholm fails to teach or suggest providing a rule engine, which evaluates business objects with no prior association and uses business rules to evaluate a relationship between the business objects, each business object being a voter that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of the votes determine values in a solution set, as claimed in independent Claim 1.

Marsh does not remedy any of the deficiencies of Chisholm. Marsh discloses a parallel/pipeline processor designed to rapidly solve optimization problems with dynamic programming. Marsh fails to teach or suggest providing a rule engine, which evaluates business objects with no prior association and uses business rules to evaluate a relationship between the business objects, each business object being a voter that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of the votes determine values in a solution set, as claimed in independent Claim

1.

Furthermore, Chisholm fails to teach or suggest a combination with Marsh and Marsh fails to teach or suggest a combination with Chisholm. Chisholm discloses a voting system for casting and tabulating votes and displaying the results, while Marsh is concerned with processors having parallel pipeline architecture. It would be impermissible hindsight based on Applicant's own disclosure to incorporate the teachings of Marsh into Chisholm. Moreover, such a combination would still fail to teach or suggest providing a rule engine, which evaluates <u>business objects with no prior association</u> and <u>uses business rules to evaluate a relationship between the business objects, each business object being a voter that provides votes that are evaluated by the business rules, wherein <u>a sequence of voters</u> and an order of the votes determine values in a solution set, as claimed in independent Claim 1.</u>

The following sets forth those sections of Chisholm and Marsh that are relied upon by the Examiner in rejecting the claimed invention, with Applicant's comments in [brackets]:

Chisholm

col. 5, lines 12-34:

FIG. 3 is a flowchart of the preferred embodiment of the invention. In this case voting begins when an individual, the proposal originator, develops one or more vote proposals. A vote proposal may take many forms. It may be able to be voted on affirmatively or negatively, or it may contain multiple alternatives that can be prioritized, that is, ranked, by voters. A vote administrator is a person or program charged with specifying terms and conditions of a voting. The vote administrator may be the same as, or different from, the proposal originator. Either the proposal originator or the vote administrator must enter the proposal into the system in electronic form (step A). In the preferred embodiment the proposal is entered by keyboard. If the proposal is entered by the originator, the system makes it available electronically to the vote administrator, for example on a computer screen. Either

before or after proposals are submitted, the vote administrator specifies the terms and conditions for the votes (step B), such as who may vote, voting deadline(s), and constraints, if any, on allowed vote types. The voting system then notifies members of the group through the voting units or through other means that there are one or more proposals to be voted on (step C).

[Comment: this teaching concerns a human-mediated system the requires a human vote administrator and a set of human voters. In Claim 1, a "rules engine" performs the function of evaluating "business objects." The rules engine is not a human, nor are Applicant's business objects humans.]

col. 5, lines 55-68:

The system then processes the votes to compute their values (represented as signals). Depending upon the types of votes allowed by the vote terms (specified by the vote administrator) and upon the specific votes cast by the voters, the processing performed will vary. As shall be seen below, a processed vote may have either a unique computed value, multiple values, or no meaningful value (i.e., no solution). An unconditional vote always has a unique value--either yes, no or abstain--but a conditional vote may have either a unique value, multiple values, or no meaningful value. The vote terms determine, among other things, how multiple values and no meaningful values of votes are handled. For example, if the computed value of a vote is either yes or no, the terms may specify that "yes" will always be selected and presented as output. This approach can help build consensus among the voters. Or, the terms may specify that both values must be presented as output. If a vote has no meaningful computed value, the terms may specify that this fact be presented as output, or they may specify that the voter who casts that vote change his or her vote. Votes that have multiple computed values are called herein indeterminate. Votes that have no meaningful values or solutions are called herein unresolvable.

[Comment: this passage teaches tabulation of human-entered votes: it has absolutely nothing to do with a computer evaluating a relationship between business objects.]

col. 8, lines 10-44:

The terms set by the vote administrator determine whether the system presents or reports all or a subset of the multiple solutions, when they arise. In the interest of consensus, the default assumption where a group of votes has multiple solutions is usually the one with the most yeses.

The vote administrator may specify any of the following output alternatives: i) present all solutions; ii) present all solutions that meet certain criteria, such as all solutions with three or more yeses; or iii) present only those solutions with either the most yeses or the most nos; or iv) present an "average" of all solutions. In addition to any of these four alternatives, the system can recommend to voters whose votes cause the multiple solutions how their votes can be modified to eliminate multiple solutions.

A different problem is encountered in the following scenario:

Voter #1 votes yes if #2 votes yes; else, no.

Voter #2 votes no if #1 votes yes; else, yes.

Restating this example more simply, A votes the same as B, and B votes the opposite of A. There is no solution. Allowing voters to vote opposite the way of others can lead to this result. These votes are called unresolvable.

In these cases, the system reports whose votes contain no solution, either to only the individuals casting those votes or to the group as a whole, depending upon the terms of the vote. One or both of the voters need to change their votes to make a solution possible. A partial solution is a subset of all of the votes that have a solution. When

there are unresolvable votes, the voting system identifies the partial solutions with the most votes, and identifies the unresolvable votes.

[Comment: Applicant has used the terminology "voter" and "vote" to refer to a weighting given the business objects. The Examiner has conflated the Applicant's meaning with that of a human voter. In Chisholm, human voters vote; in the claimed invention, business objects are weighted to resolve conflicts in determining a solution set for a business problem. In this regard, a few definitions from Applicant's specification will contrast the invention with Chisholm:

What Are Rules?

Business rules are configurable, generalized statements of how common processing methods are applied to a specific intersection of data. Business rules determine:

- privileges what a user can create, view, update, select, or delete.
- application of business processes what processes are accepted, such as buying with credit cards.
- business relationships relationships between selling and buying companies,
 e.g., what price list is used when Catalog X is selected or where the item is shipped to or from.
- choices and default values the defaults for options such as ship-to address or payment methods. (page 10, lines 10-23)

Rule Components

The main components of a rule are:

voters

- votes
- resolution strategy

A voter is a member or business object such as a product, price list, or ship-to location that provides input to be evaluated by the rule. This input is known as votes. The voters have a specified sequence within a rule. This sequence determines the order in which a particular voter's votes are evaluated by the resolution strategy assigned to the rule.

Voters can be data objects, domain tables, or the results of other rules. For example, a voter represents a specific instance of a object that is related to the object (e.g., an order) being operated on by the calling program. (page 14, lines 10-24; emphasis added: note that "voters" as used by Applicant are not humans casting votes on issues, as taught by Chisholm)

Chisholm, col. 9, lines 35-50:

The consensus building chart allows a group to see how close or far away it is from achieving consensus, or from achieving a coalition of a particular size. If a voting has successive iterations, the graph may vary with each iteration. In that case, the graph can be updated or played back in real time, allowing voters to review an animated history of the group's preferences as they have evolved, to visually gauge the momentum towards consensus, or to pinpoint turning points or major events in the group's dynamics. FIG. 5 illustrates a consensus building chart with three successive iterations; y.sub.1, y.sub.2, and y.sub.3. The figure shows how the acceptance of the proposal has changed with each successive vote, indicating that at least some of the individual voters have modified their votes. Similarly, if y.sub.1, y.sub.2, and y.sub.3 were to indicate three different proposals, then a chart looking like FIG. 5 could be used to gauge the relative acceptance of each distinct proposal.

[Comment: this passage refers to building a consensus among humans, i.e. the voters.

The invention concerns business objects, not humans. The invention does not seek to build a consensus among humans, it determines a solution set for a business problem.]

col. 10, lines 55-68 to col. 11, line 3:

At the beginning of stage 1 (step H), the system examines the votes in whatever order they happen to be in, and identifies the unconditional ones (yes, no, abstain, no-vote). As the system examines each vote, it also evaluates any conditional votes that have become determinable as a result of unconditional votes now determined. Votes so determined are conditional votes that are dependent only on the unconditional votes. Then the system passes through the list again and evaluates all new votes that are dependent only on the ones previously determined, either conditional or unconditional. This process is repeated until an iteration occurs on which no new votes are determined. If all votes in the group have been determined by this process (step I), the system is finished and the results are displayed. If all votes have not been determined, we proceed to stage 2 (step J in FIG. 9A; P in FIG. 9B).

[Comment: Again, the votes being examined are votes that were cast by humans. This passage merely teaches the tabulation of votes that are human cast. It has nothing to do with votes associated with business objects. The contrast is quite striking – the invention uses the notion of a vote as a weighting for business objects; Chisholm merely uses votes in the conventional, human cast sense. Further, this passage has nothing to do with evaluating the votes in such manner that the sequence and order determines a solution set value. Chisholm is not interested in determining a solution set value, but only with tabulating human cast votes. Further, this passage does not teach or suggest that both the sequence and order in which votes are cast could affect an outcome. Rather, Chisholm only teaches a mechanism for resolving conditional votes. In fact, Chisholm teaches away from determining a solution set value based upon vote sequence and order by stating that "the system examines the votes in whatever order they happen to be in..."]

Marsh

col. 3, lines 8-11:

As mentioned previously, dynamic programming is an approach for solving

optimization (maximization or minimization) problems, relying on dissecting the main

optimization problem into many intermediate optimization problems.

[Comment: What is the person skilled in the art to learn from this passage? The Examiner

relies upon this passage, and the next, to teach "a process for evaluating business objects

with no prior association and creating dynamic solution sets based on said evaluation in a

computer environment"; and to provide a motivation for combining this teaching with

Chisholm. If the inventors of the claimed invention were to give Marsh and Chisholm to a

programmer, it would not be possible to build the claimed invention without providing

inventive effort.]

col. 4, lines 22-28:

Moreover, most dynamic program solutions specify the optimum transition at each

state of the system for every stage; thus, a dynamic programming solution can be

implemented as a feedback (closed-loop) controller, in which the state of the system

is constantly measured and the corresponding optimum control is applied.

[Comment: ????]

col. 2, lines 21-25:

The present invention provides a processor especially designed to solve dynamic

programs in a minimum of time and without the necessity of complex interprocessor

communication.

20

[Comment: The Examiner relies upon this passage to teach the person skilled in the art that there is a motivation to solve a dynamic program with a minimum amount of time and without complex interprocessor communication. How? Marsh merely teaches a processor architecture. The Examiner is suggesting that anyone aware of Marsh's processor could adapt Chisholm's human vote tabulation system to produce the claimed business object evaluation system.]

A reference itself must sufficiently describe the claimed invention to have placed the public in possession of it.⁵ Even if a claimed invention is disclosed in a printed publication, that disclosure will not suffice as prior art if it was not enabling.⁶ The lack of teaching in both Chisholm and Marsh of Applicant's claimed inventive elements of:

"a rule engine... [that] evaluates ... business objects; ...administration means for allowing a user to maintain preferences for a specific instance of a business object; ... [the] rule engine ... [using] business rules to evaluate a relationship between ... [the] business objects; wherein each business object is a voter that provides votes that are evaluated by ... [the] business rules; ... rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set; ... wherein a sequence of voters and an order of the votes included for each voter determine values in ... [the] solution set"

means that, not only would the skilled person be required to supply the missing elements, but that the skilled person would have to determine how to implement these elements as well. Accordingly, the Examiner's combination is fatally defective in at least two regards.

In addition to the reasons given above, the *prima facie* obviousness case is also defective because there has been no suggestion or motivation, either in the references

⁵ Paperless Accounting, Inc. v. Bay Area Rapid Transit System, 231 USPQ 649, 653 (Fed. Cir. 1986). Ex parte Gould, 231 USPQ 421 (CCPA 1973).

⁶ *Id*.

themselves, or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.⁷

The law requires clear and particular evidence of a suggestion, teaching, or motivation to combine references or modify reference teachings. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence." In addition to demonstrating the propriety of an obviousness analysis, the Federal Circuit recognizes the value of particular factual findings regarding the suggestion, teaching, or motivation to combine because this serves a number of important purposes, including: (1) clear explication of the position adopted by the Examiner and the Board; (2) identification of the factual disputes, if any, between the applicant and the Board, and (3) facilitation of review on appeal.

Accordingly, the *prima facie* case of obviousness is lacking because there has been no showing of the legally required suggestion or motivation to modify the reference or to combine reference teachings.

Rather than a legally sufficient suggestion or motivation, modification of Chisholm to incorporate features from Marsh is simply a result of hindsight reconstruction. This amounts to simply hunting for a missing feature until it is found in some secondary reference, and then reflexively pairing this reference with the primary reference. However, it is improper to attempt to establish obviousness by using the Applicant's specification as a guide to combining different prior art references to achieve the results of the claimed invention. The teaching or suggestion to make the claimed combination must be found in

⁷ MPEP 2142.

⁸ See, e.g., C.R. Bard, Inc. v. M3 Sys., Inc., 48 USPQ2d 1225, 11232 (Fed. Cir. 1998).

⁹ See, e.g., C.R. Bard, Inc. v. M3 Sys., Inc., 48 USPQ2d 1225, 11232 (Fed. Cir. 1998)

¹⁰ Orthopedic Equipment Co., Inc. v. United States, 702 F.2d 1005, 1012, 217 USPQ 193, 199 (Fed. Cir. 1983).

the prior art, and not based on applicant's disclosure.¹¹ The critical inquiry is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.¹² Obviousness is tested by what the combined teachings of the references would have suggested to those of ordinary skill in the art.¹³ But it Acannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination.¹⁴ And teachings of references can be combined only if there is some suggestion of incentive to do so.¹⁵

To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher. ¹⁶ It is essential that the decision maker forget what he or she has been taught at trial about the claimed invention and cast the mind back to the time the invention was made. . . to occupy the mind of one skilled in the art who is presented only with the references, and who is normally guided by the then-accepted

¹¹ In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In re Fritch, 23 USPQ 2d 1780, 1784 (Fed. Cir. 1992) ("It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious."); Fromson v. Advance Offset Plate, Inc., 755 F.2d 1549, 1556, 225 USPQ 26, 31 (Fed. Cir. 1985) (nothing of record plainly indicated that it would have been obvious to combine previously separate lithography steps into one process). See e.g., In re Gordon et al., 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (mere fact that prior art could be modified by turning apparatus upside down does not make modification obvious unless prior art suggests desirability of modification); Ex Parte Kaiser, 194 USPQ 47, 48 (Pat. Bd. of App. 1975) (Examiner's failure to indicate anywhere in the record his reason for finding alteration of reference to be obvious militates against rejection).

¹³ In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981).

¹⁴ ACS Hosp. Sys. Inc. v. Montefiore Hosp., 32 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984).

¹⁵ *ld.*

¹⁶ W. L. Gore & Assoc. v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

wisdom in the art.17

The policy of the Patent and Trademark Office¹⁸ is to follow in each and every case the standard of patentability enunciated by the Supreme Court in *Graham v. John Deere Co.*¹⁹ As stated by the Supreme Court:

Under '103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or non-obviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.²⁰

Thus, hindsight reconstruction, using the applicant's specification itself as a guide, is improper because it fails to consider the subject matter of the invention "as a whole" and fails to consider the invention as of the date at which the invention was made.

In addition to the reasons stated above, the *prima facie* obviousness case is further defective because the Office Action failed to show that there would be a reasonable expectation of success in modifying/combining references.²¹ The Examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.²² If the

¹⁷ *Id.*

¹⁸ MPEP 2141.

^{19 148} USPQ 459 (1966).

^{20 148} USPQ at 467.

²¹ MPEP 2142, 2143.02.

²² MPEP 2142.

Examiner does not produce a prima facie case, the Applicant is under *no* obligation to submit evidence of nonobviousness.²³ Critically, to establish a *prima facie* case of obviousness, *there must be a reasonable expectation of success.*²⁴ This reasonable expectation of success must be found in the prior art, not in Applicant's disclosure.²⁵

The Office Action lacks any evidence, allegation, or mere mention of the legally required "reasonable expectation of success." Because this mandatory topic is unaddressed by the Office Action, no *prima facie* case of obviousness has been properly established.

As shown above, Claim 1 is patentable because a *prima facie* case of obviousness does not exist. Namely, (1) the applied art fails to teach the features of the claims, (2) there is insufficient motivation to combine/modify references as proposed by the Office Action, and (3) there is no showing that an ordinarily skilled artisan would have a reasonable expectation of success in making the office action's proposed modification of references.

Claim 8

Applicant restates that above argument for Claim 1 with regard to Claim 8, the claim limitations being similar and the bases for rejection also being similar. As with Claim 1, based upon the above reasoning, Claim 8 is patentably distinct from the Examiner's proposed combination of references, and reversal is appropriate.

Claim 15

Applicant restates that above argument for Claim 1 with regard to Claim 15, the claim limitations being similar and the bases for rejection also being similar. As with Claim 1,

²³ Id.

²⁴ MPEP 2143.

²⁵ In re Vaeck, 947 F.2d 488, 20 USPQ.2d 1438 (Fed. Cir. 1991). MPEP 2143.

based upon the above reasoning, Claim 15 is patentably distinct from the Examiner's proposed combination of references, and reversal is appropriate.

Claims 2-4, 6, 7, 9-11, 13, 14, 16-18, 20, and 21

Claims 2-4, 6, 7, 9-11, 13, 14, 16-18, 20, and 21 depend directly or indirectly from allowable independent Claims 1, 8, and 15, respectively. As a result, Claims 2-4, 6, 7, 9-11, 13, 14, 16-18, 20, and 21 should also be allowed at least for the same reasons as stated above with respect to Claims 1, 8, and 15.

Subparagraph (v) -- OTHER GROUNDS OF REJECTION

There are no other grounds of rejection.

CONCLUSION

For the foregoing reasons, the claims in the application are clearly and patentably distinguished over the cited references. Accordingly, the Examiner should be reversed and ordered to pass the case to issue.

If any fees are required by this submission, an appropriate fee submittal sheet is enclosed herewith. If fees are required yet this sheet is inadvertently missing, or the fees are incorrect in amount, please charge the charge the required fees (or credit any overpayment) to Deposit Account No. 07-1445.

Respectfully submitted,

Michael Glenn

Reg. No. 30,176

USPTO Customer 22,862



APPENDIX A

Applicant's Claims 1-4, 6-11, 13-18, 20, and 21

APPENDIX A

Applicant's Claims 1-4, 6-11, 13-18, 20, and 21

1. (previously amended) A process for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising the steps of:

providing a rule engine;

wherein said rule engine evaluates said business object;

providing administration means for allowing a user to maintain preferences for a specific instance of a business object;

wherein said rule engine uses business rules to evaluate a relationship between said business objects;

wherein each business object is a voter that provides votes that are evaluated by said business rules;

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set; and

wherein a sequence of voters and an order of the votes included for each voter determine values in said solution set.

 (original) The process of claim 1, further comprising the steps of: providing domain tables;

wherein said tables are used to define the overall set of possible values for a given attribute of a business object; and

wherein said tables are static, configured, or dynamic in nature.

3. (original) The process of claim 1, wherein said business rules are configurable, generalized statements of how common processing methods are applied to a specific intersection of data; and wherein said business rules determine privileges, application of business processes, business relationships, choices, and default values.

- (original) The process of claim 1, further comprising the step of: providing rule administration means for allowing a user to define business rule attributes.
- 5. (canceled)
- 6. (original) The process of claim 1, wherein said rule engine returns one solution set for the set of business objects (voters) being referenced.
- 7. (original) The process of claim 1, wherein said business rules are cached.
- 8. (previously amended) An apparatus for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising:

a rule engine;

wherein said rule engine evaluates said business objects;

administration means for allowing a user to maintain preferences for a specific instance of a business object;

wherein said rule engine uses business rules to evaluate a relationship between said business objects;

wherein each business object is a voter that provides votes that are evaluated by said business rules;

rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set; and

wherein the sequence of voters and the order of the votes included for each voter determines values in said solution set.

9. (original) The apparatus of claim 8, further comprising: domain tables;

wherein said tables are used to define the overall set of possible values for a given attribute of a business object; and

wherein said tables are static, configured, or dynamic in nature.

- 10. (original) The apparatus of claim 8, wherein said business rules are configurable, generalized statements of how common processing methods are applied to a specific intersection of data; and wherein said business rules determine privileges, application of business processes, business relationships, choices, and default values.
- 11. (original) The apparatus of claim 8, further comprising:
 rule administration means for allowing a user to define business rule attributes.
- 12. (canceled)
- 13. (original) The apparatus of claim 8, wherein said rule engine returns one solution set for the set of business objects (voters) being referenced.
- 14. (original) The apparatus of claim 8, wherein said business rules are cached.
- 15. (previously amended) A program storage medium readable by a computer, tangibly embodying a program of instructions executable by the computer to perform method steps for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, comprising the steps of:

providing a rule engine;

wherein said rule engine evaluates said business objects;

providing administration means for allowing a user to maintain preferences for a specific instance of a business object;

wherein said rule engine uses business rules to evaluate a relationship between said business objects;

wherein each business object is a voter that provides votes that are evaluated by said business rules;

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set; and

wherein the sequence of voters and the order of the votes included for each voter determines values in said solution set.

16. (original) The method of claim 15, further comprising the steps of: providing domain tables;

wherein said tables are used to define the overall set of possible values for a given attribute of a business object; and

wherein said tables are static, configured, or dynamic in nature.

- 17. (original) The method of claim 15, wherein said business rules are configurable, generalized statements of how common processing methods are applied to a specific intersection of data; and wherein said business rules determine privileges, application of business processes, business relationships, choices, and default values.
- 18. (original) The method of claim 15, further comprising the step of:
 providing rule administration means for allowing a user to define business rule
 attributes.
- 19. (canceled)
- 20. (original) The method of claim 15, wherein said rule engine returns one solution set for the set of business objects (voters) being referenced.
- 21. (original) The method of claim 15, wherein said business rules are cached.



APPENDIX B

Applicant's Figures 1-11



1/11

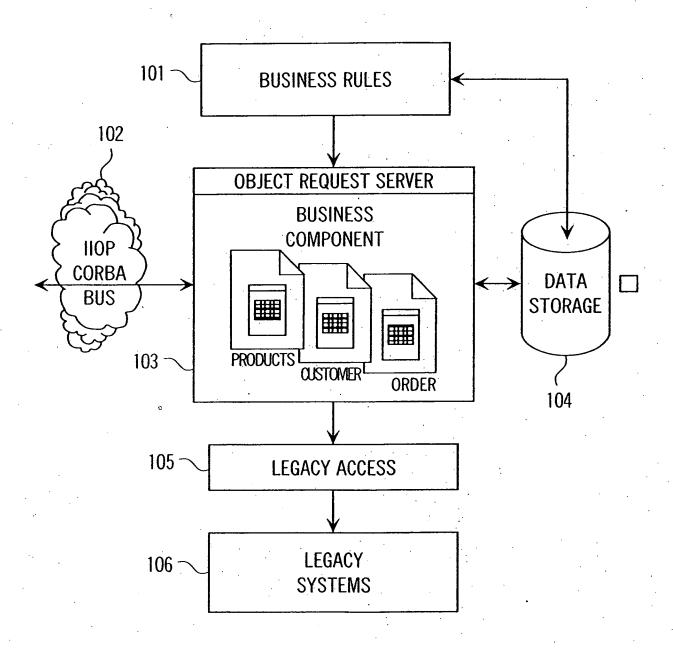


FIG. 1

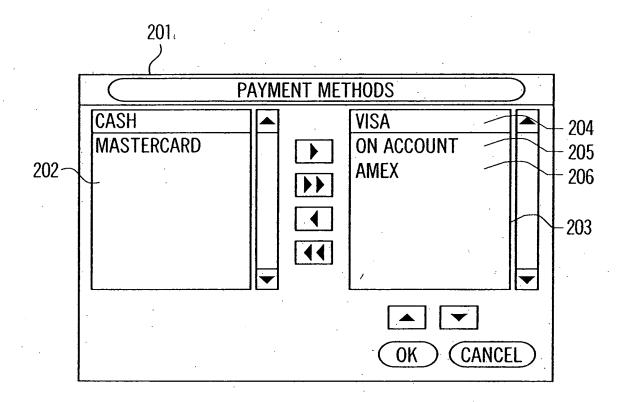


FIG. 2

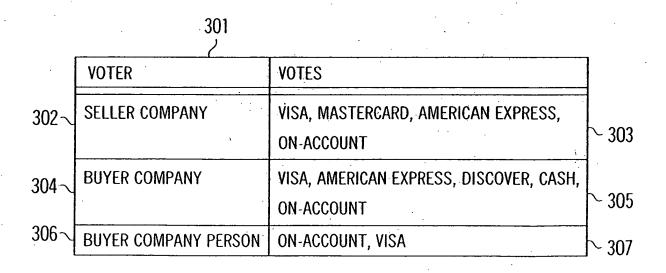


FIG. 3

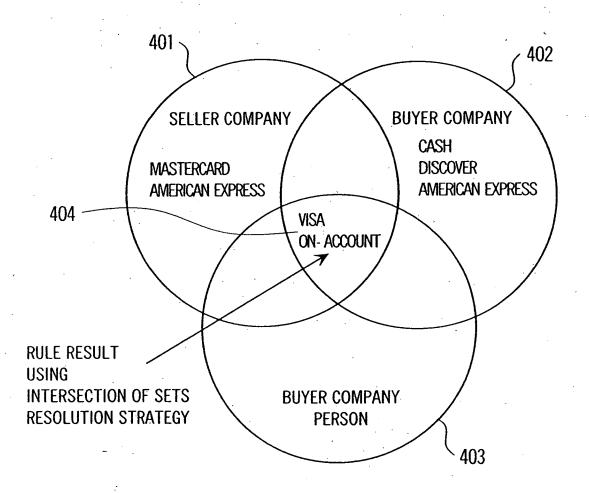


FIG. 4

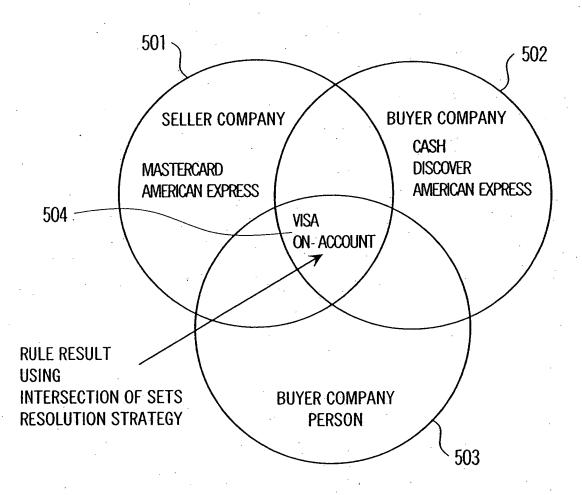


FIG. 5A

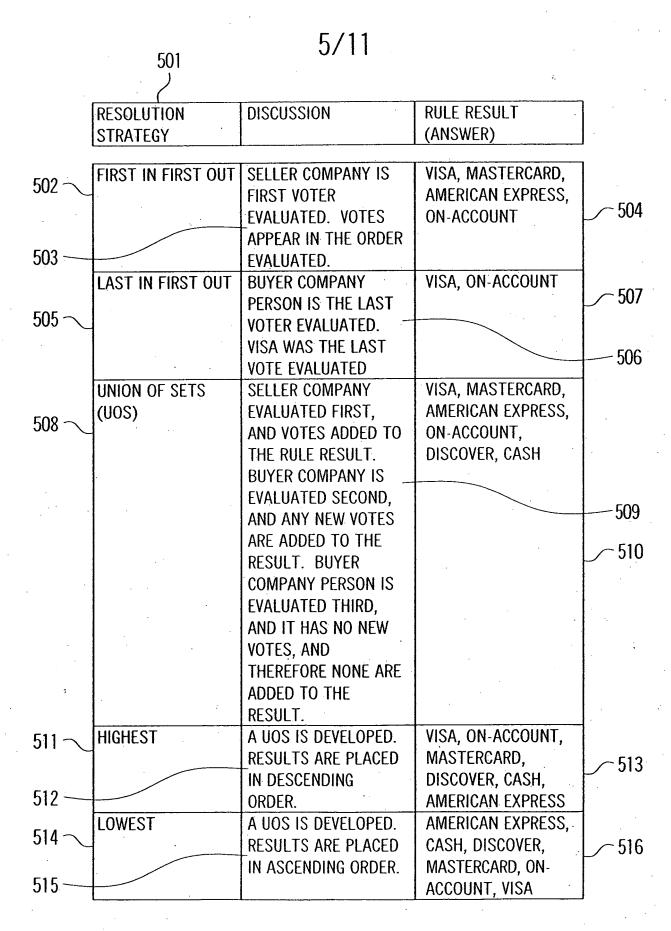
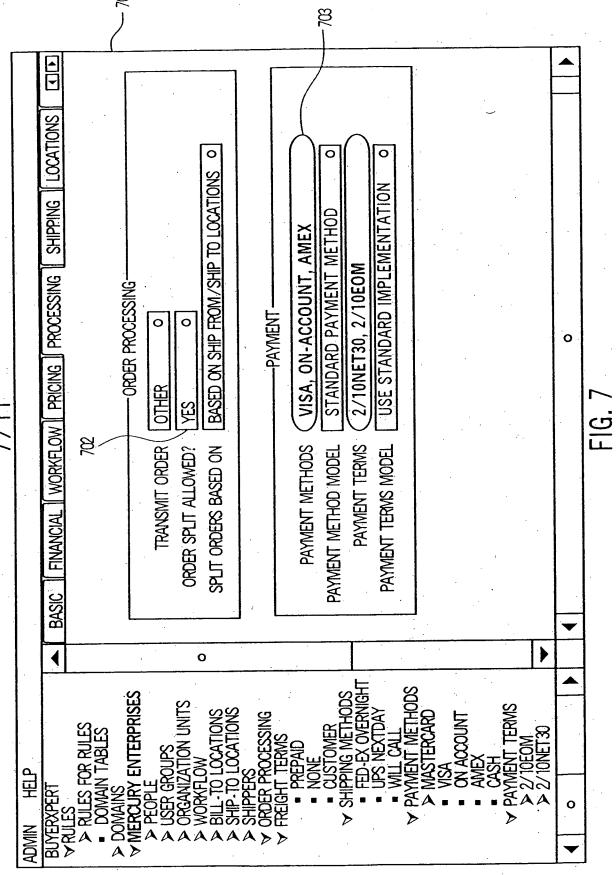


FIG. 5B

601

PAYMENT MET	THOD: COMPANY DEFAULT ▼ NEW.
CUSTOMER P	P.O. #:
SHI	IP VIA: COMPANY DEFAULT 🕶
PREFERRED DELIVERY DATE (MM/DE	D/YY): 02/17/9
TOTAL GOODS AND SERV	VICES: 287.60
<u>ADJUSTM</u>	<u>IENTS</u> : 0.00
NET T	OTAL: 287.60
SHIF	PPING: 6.70
TAXABLE AMO	OUNT: 294.30
	TAX: 22.07
T	OTAL: 316.37
	RECALCULATE



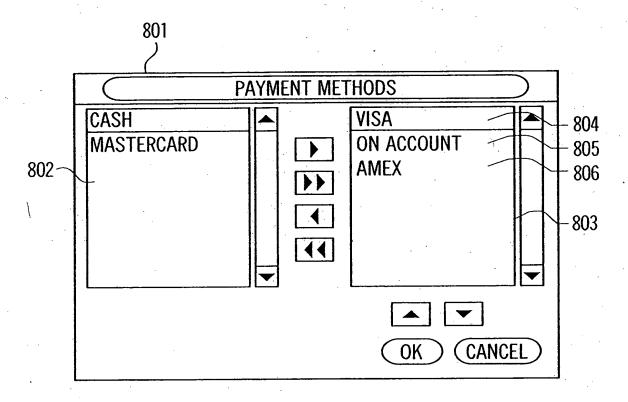
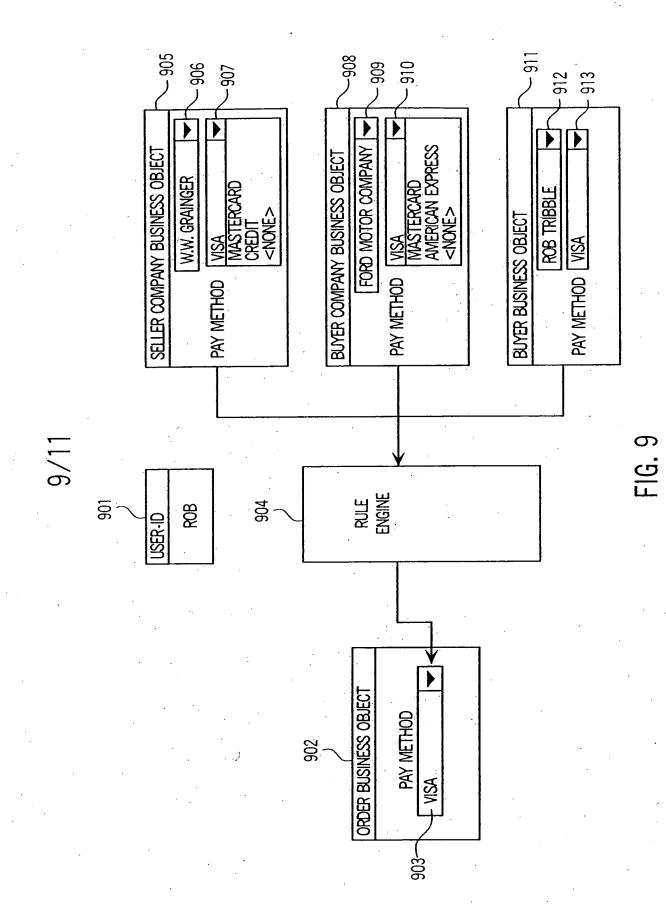
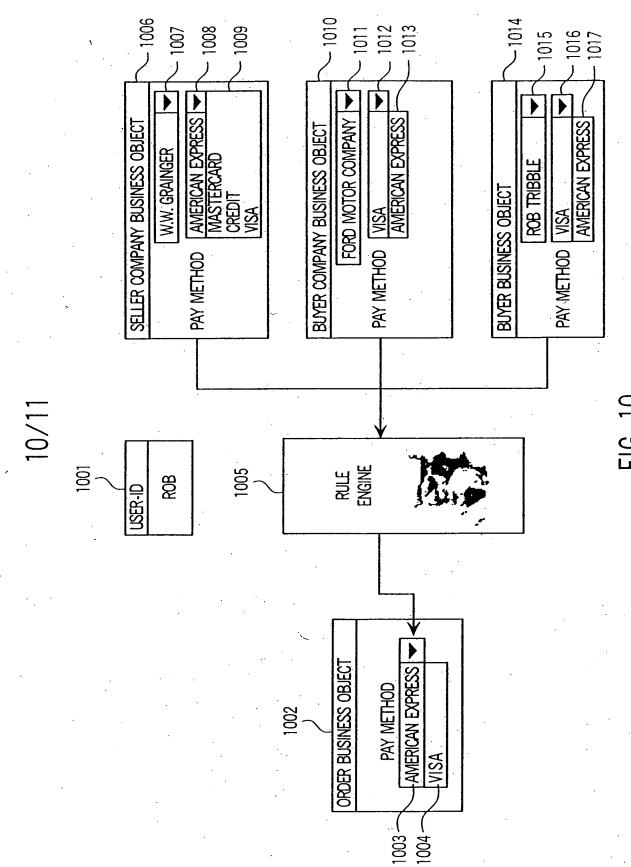


FIG. 8





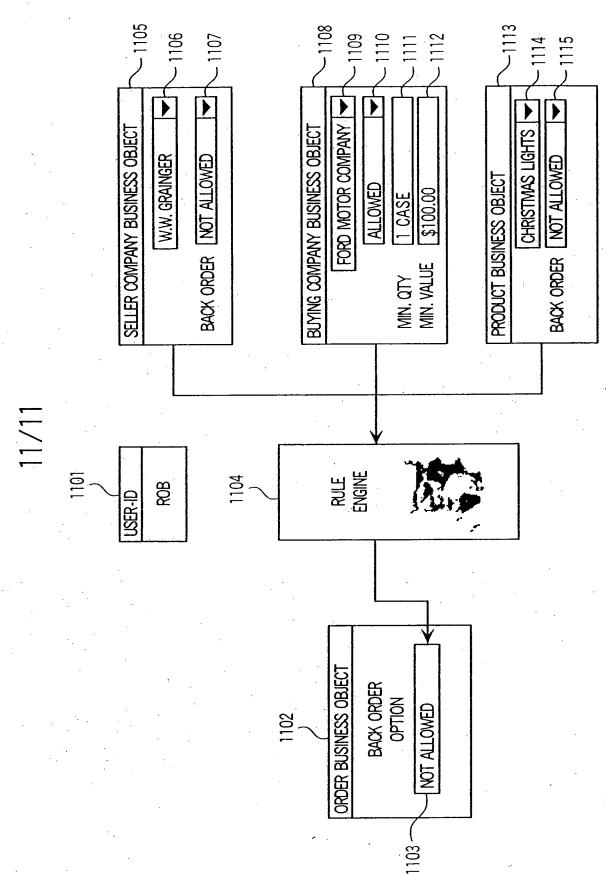


FIG. 11



APPENDIX C

Copy of the Non-Final Office Action dated 8/27/04



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/668,125	09/21/2000	Rob Tribble	NETS0044	1382
· 22862 75	90 08/27/2004	OIPE	EXAM	INER
GLENN PATI		/ Ro	FRENEL	VANEL
3475 EDISON ' MENLO PARK	WAY, SUITE L	OCT 2 1 2005)	ART UNIT	PAPER NUMBER
MENLOTAK	, CA 74025	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	3626	
		TRADEMARK OF	DATE MAILED: 08/27/200	4
	•	HADE		

Please find below and/or attached an Office communication concerning this application or proceeding.

GPG
U.S.: FOREIGN:
DOCKETED: 9/2/04 BY: EL
ACTION: Response Due
DUE DATE: 1/27/09
EXT: 1ST /2/272ND //27 3RD 2/27/05
DOCKET# NETS 60 44 ATTY: A-C

SEP - 1 2004
GLENN PATENT GROUP

OIFE	Application No.	Applicant(s)			
21 2005	09/668,125	TRIBBLE, ROB			
Office Action Summant 21 2005	Examiner	Art Unit			
	Vanel Frenel	3626			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment: See 37 CFR 1.704(b).					
Status					
1) Responsive to communication(s) filed on 7/7/0	<u>4</u> .				
2a) This action is FINAL. 2b) ☑ This	action is non-final.				
3) Since this application is in condition for allowar	nce except for formal matters, pro	secution as to the ments is			
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Claims					
4) Claim(s) 1-4,6-11,13-18,20 and 21 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-4,6-11,13-18,20 and 21 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examine	r.				
10) The drawing(s) filed on is/are: a) acc	epted or b) \square objected to by the \square	Examiner.			
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori	s have been received. s have been received in Applicati ity documents have been receive ı (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment/cl		•			
Attachment(s) 1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)			
2) Notice of Preferences Cited (PTO-992) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da				

Art Unit: 3626

DETAILED ACTION

Notice to Applicant

- 1. This communication is in response to the Amendment filed 2/10/04. Claims 1-4, 6-11, 13-18 and 20-21 are pending.
- 2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-4, 6-11, 13-18 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chisholm (5,400,248) in view of Marsh et al (4,210,962).
- (A) As per claim 1, Chisholm discloses the steps of:

 providing a rule engine (See Chisholm, Col.5, lines 17-34 The Examiner interprets Chisholm's voter administrator program to be a form of "rules engine");

 wherein said rule engine evaluates said business objects (Col.5, lines 23-34 The

wherein said rule engine evaluates said business objects (Col.5, lines 23-34 The Examiner interprets "votes" as "business objects");

providing administration means for allowing a user to maintain preferences for a specific instance of a business objective (Col.5, lines 12-34);

wherein said rule engine uses business rules to evaluate a relationship between said business objects (Col.5, lines 55-68 The Examiner understands conditional votes are votes having a relationship to other votes); and

wherein each business object is a voter that provides votes that are evaluated by said business rules (Col.5, lines 12-34);

providing rule resolution strategy means for resolving conflicts between specific preferences of voters and determining a correct solution set (Col.5, lines 55-65; Col.8, lines 10-44);

wherein a sequence of voters and an order of the votes included for each voter determines values in said solution set (Col.9, lines 35-50) Col.10, lines 55-68 to Col.11, line 3)

Chisholm does not explicitly disclose a process for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment, as recited in the preamble of claim 1.

However, this feature is known in the art, as evidenced by Marsh. In particular, Marsh suggests a process for evaluating business objects with no prior association and creating dynamic solution sets based on said evaluation in a computer environment (See Marsh, Col.3, lines 8-11; Col.4, lines 22-28).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Marsh within the system of Chisholm with the motivation of solving dynamic programs in a minimum of time and without the necessity of complex interprocessor communication (See Marsh Col.2, lines 21-25).

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- (B) As per claim 2, Marsh discloses the process further comprising the steps of:
 providing domain tables (Col.4, lines 28-55); wherein said tables are used to
 define the overall set of possible values for a given attribute of a business object (Col.5,
 lines 66 to Col.6, line 31 and Figs 1a-1c); and wherein said tables are static, configured,
 or dynamic in nature (Col.4, lines 22-28; Col.5, lines 66 to Col.6, line 31 and Figs 1a1c).
- (C) As per claim 3, Chisholm discloses the process wherein said business rules are configurable, generalized statements of how common processing methods are applied to a specific intersection of data (Col.10, lines 4-30); and wherein said business rules determine privileges, application of business processes, business relationships, choices, and default values (Col.12, lines 1-45).
- (D) As per claim 4, Chisholm discloses the process further comprising the step of: providing rule administration means for allowing a user to define business rule attributes (Col.16, lines 61-68 to Col.17, line 7).
- (E) As per claim 6, Chisholm discloses the process wherein said rule engine returns one solution set for the set of business objects (voters) being referenced (Col.8, lines 30-68).

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(F) As per claim 7, Chisholm discloses the process wherein said business rules are cached (Col.5, lines 10-47).

(G) Apparatus Claims 8-14 differ from method claims 1-7 by reciting an apparatus for performing the underlying process steps of method claims 1-7. Since Chisholm clearly discloses the underlying process steps recited in claims 1-7, it is readily apparent that Chisholm discloses the necessary apparatus for performing those steps. Note, for example, the recitation in Chisholm with regard to a programming interface and a network (Chisholm, Col.4, line 65 to Col.5, line 10).

The remainder of claims 8-14 repeat the same limitations addressed above in the rejections of claims 1-7, and are therefore rejected for the same reasons given for claims 1-7.

(H) Claims 15-21 differ from claims 1-7 by reciting a "program storage medium readable, tangibly embodying a program of instructions". As per this limitation, Note, for example, the recitation in Chisholm with regard to a programming interface and a network (Chisholm, Col.4, line 65 to Col.5, line 10).

The remainder of claims 15-21 repeat the same limitations addressed above in the rejections of claims 1-7, and are therefore rejected for the same reasons given for claims 1-7.

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Response to Arguments

5. Applicant's arguments with respect to claims 1-4, 6-11, 13-18 and 20-21 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with regard to the teachings of Fisk and Chacker are moot, as these references are not applied against the pending claims Rather, it is the collective teachings of Chisholm and White that obviate the presently pending claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied art teaches electronic trusted party (5,117,358).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 703-305-4952. The examiner can normally be reached on Monday-Thursday from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

V.F

August 20, 2004

VISORY PATENT EXAMINER TECHNOLOGY CENTER 3600

Notice of References ited OCT 2.1 2005 U.S. PATENT DOCUMENTS Application/Control No. Applicant(s)/Patent Under Reexamination TRIBBLE, ROB Art Unit Page 1 of 1

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*		Document Number Country Code-Number-Kind	Date MM-YYYY	Name	Classification
v	Α	US-5,400,248	03-1995	Chisholm, John D.	705/12
	В	US-2002/0091550	07-2002	White et al.	705/4
	С	US-5,117,358	05-1992	Winkler, Peter M.	708/135
	D	US-4,210,962	07-1980	Marsh et al.	705/7
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NON-PATENT DOCUMENTS

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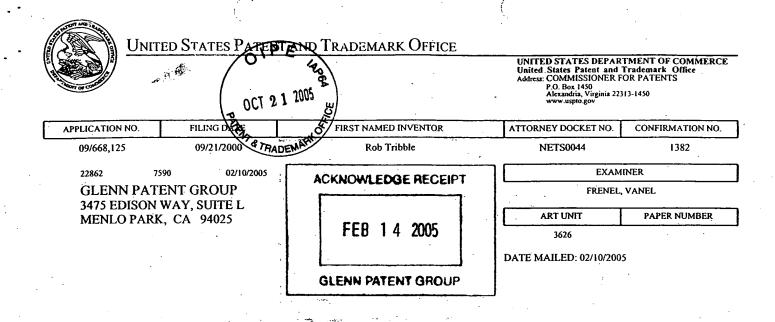
*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)

Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



APPENDIX D

Copy of the Final Office Action dated 2/10/05



Please find below and/or attached an Office communication concerning this application or proceeding.

			,
0.	Application	on No. Applicant(s)	
	Office Action Summary act 2 1 2005	5 TRIBBLE, ROB	
	Office Action Summary OCT 2.1 2003 Caminer	Art Unit	
	Vanel Fre		
Period fo	The MAILING DATE of this community to the property on the property of the community of t	cover sheet with the correspondence address	
A SH THE - Exter after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY IS SET TO MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.136(a). In no even SIX (6) MONTHS from the mailing date of this communication. In period for reply specified above is less than thirty (30) days, a reply within the stature of the period for reply is specified above, the maximum statutory period will apply and will apply in the toreply within the set or extended period for reply will, by statute, cause the applitation of the period of the complex period will apply and will reply received by the Office later than three months after the mailing date of this content term adjustment. See 37 CFR 1.704(b).	nt, however, may a reply be timely filed tory minimum of thirty (30) days will be considered timely. I expire SIX (6) MONTHS from the mailing date of this communicatio cation to become ABANDONED (35 U.S.C. § 133).	on.
Status			
1)[Responsive to communication(s) filed on 29 November 20	004	
	This action is FINAL . 2b) ☐ This action is no	 -	
3)	Since this application is in condition for allowance except	·	s
	closed in accordance with the practice under Ex parte Qua	• •	_
Dispositi	ion of Claims		
	Claim(s) <u>1-4,6-11,13-18,20 and 21</u> is/are pending in the ap 4a) Of the above claim(s) is/are withdrawn from con	•	
·	Claim(s) is/are allowed.	sideration.	
·	Claim(s) <u>1-4, 6-11, 13-18, 20-21</u> is/are rejected.		
	Claim(s) is/are objected to.		
· · · —	Claim(s) are subject to restriction and/or election re	quirement	
		quicinent	
	on Papers		
	The specification is objected to by the Examiner.	_	
10)[_]	The drawing(s) filed on is/are: a)☐ accepted or b)[· , ·	
	Applicant may not request that any objection to the drawing(s) be		
	Replacement drawing sheet(s) including the correction is require		d).
11)	The oath or declaration is objected to by the Examiner. No	te the attached Office Action or form PTO-152.	
Priority u	ınder 35 U.S.C. § 119		
	Acknowledgment is made of a claim for foreign priority und ☐ All b)☐ Some * c)☐ None of:	er 35 U.S.C. § 119(a)-(d) or (f).	
	1. Certified copies of the priority documents have been	received.	
	2. Certified copies of the priority documents have been		
	3. Copies of the certified copies of the priority docume		
,	application from the International Bureau (PCT Rule	17.2(a)).	•
* S	see the attached detailed Office action for a list of the certification	ed copies not received.	
.•			
Attacher ===	We)		
Attachment	•	4) Interview Summary (PTO-413)	
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date	
3) 🔲 Inform	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal Patent Application (PTO-152) 6) Other:	

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DETAILED ACTION

Notice to Applicant

This communication is in response to the Amendment filed on 11/29/04. Claims 1-4, 6-11, 13-18 and 20-21 are pending.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-4, 6-11, 13-18 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chisholm (5,400,248) in view of Marsh et al (4,210,962), for substantially the same reasons given in the prior Office Action, and incorporated herein. Further reasons appear hereinbelow.
- (A) Claims 1-4, 6-11, 13-18 and 20-21 have not been amended and are rejected for the same reasons given in the prior Office Action mailed 8/27/04, and incorporated herein.

Response to Arguments

Applicant's arguments filed on 11/29/04 with respect to claims 1-4, 6-11, 13-18 and 20-21 have been fully considered but they are not persuasive. Applicant's arguments will be addressed in the order they appear hereinbelow.

Page 2

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At pages 2-4 of the 11/29/04 response, Applicant's argues the followings:

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- (1) Chilsholm and Marsh, taken alone or in combination, fail to teach, suggest, or render obvious the present invention as claimed.
- (2) Chilsholm and Marsh fail to teach or suggest providing a rule engine, which evaluates a relationship objects with no prior association and uses business rules to evaluate a relationship between the business objects, each business object being a voter that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of the votes determine values in a solution set, as claimed in independent claims 1,8, and 15.
 - (3) Impermissible hindsight to combine Chilshom and Marsh.
- (A) With respect to Applicant's first argument, Examiner respectfully submits that obviousness is not determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See In *re Oetiker*, 977F. 2d 1443, 1445,24 USPQ2d 1443, 1444 (Fed. Cir. 1992); In *re Hedges*, 783F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir.1992); In *re Piaseckii*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir.1984); In *re Rinehart*, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Using this standard, the Examiner respectfully submits that he has at least satisfied the burden of presenting a prima facie case of obviousness, since he has presented evidence of corresponding claim elements in the prior art and has expressly articulated the combinations and the motivations for combinations that fairly suggest Applicant's claimed invention. Note, for example, in the instant case, the Examiner respectfully

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notes that each and every motivation to combine the applied references are accompanied by select portions of the respective reference(s) which specially support that particular motivation and /or an explanation based on the logic and scientific reasoning of one ordinarily skilled in the art at the time of the invention that support a holding of obviousness. As such, it is not seen that the Examiner's combination of references is unsupported by the applied prior art of record. Rather, it is respectfully submitted that explanation based on the logic and scientific reasoning of one of ordinarily skilled in the art at the time of the invention that support a holding of obviousness has been adequately provided by the motivations and reasons indicated by the Examiner, Ex parte Levengood, 28 USPQ2d 1300(Bd. Pat. App.& Inter., 4/22/93). Therefore, the combination of references is proper and the rejection is maintained.

In addition, the Examiner recognizes that references cannot be arbitrarily altered or modified and that there must be some reason why one skilled in the art would be motivated to make the proposed modifications. However, although the Examiner agrees that the motivation or suggestion to make modifications must be articulated, it is respectfully contended that there is no requirement that the motivation to make modifications must be expressly articulated within the references themselves.

References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures, In *re Bozek*, 163 USPQ 545 (CCPA 1969). Therefore, Applicant's argument is not persuasive.

(B) With respect to Applicant's second argument, Examiner respectfully submits that

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He has relied upon Chisholm for the teaching of "a rule engine" which correspond to voter administrator program (See Chisholm, Col.5, lines 17-34). In addition, Examiner respectfully submits that He has relied upon Chisholm for the teaching of "each business object being a voter (See Chisholm, Col.5, lines 12-34) that provides votes that are evaluated by the business rules, wherein a sequence of voters and an order of the votes determine values in a solution set (See Chisholm, Col.9, lines 35-50; Col.10, lines 55-68 to Col.11, line 3) which correspond to Applicant claimed feature. Therefore, Applicant argument is not persuasive.

With regard to the teaching of "evaluating a relationship objects with no prior association and uses business rules". Examiner respectfully submits that Marsh suggests "dynamic programming is an approach for solving optimization (maximization or minimization) problems, relying on dissecting the main optimization problem into many intermediate optimization problems" since Marsh has been using variables which provide an absolute optimum transition in each state space (See Marsh, Col.3, lines 8-11; Col.4, lines 22-28) which correspond to Applicant's claimed feature. Therefore, Applicant argument is not persuasive.

(C) In response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account <u>only knowledge</u> which was within the level of or<u>dinary skill at the time the claimed invention was made</u>, and does

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not include knowledge gleaned only from the Applicant's disclosure, such a reconstruction is proper. See In re *McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 703-305-4952. The examiner can normally be reached on Monday-Thursday from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9588. The fax phone numbers

for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

V, F ∨.F

January 31, 2005

JOSEPH THOMAS

SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600 APPENDIX E

USPN 5,400,248

APPENDIX F

USPN 4,210,962